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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,297	01/23/2001	Helmut Goeldner	1997/49442	4017

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CROWELL & MORING LLP  
INTELLECTUAL PROPERTY GROUP  
P.O. BOX 14300  
WASHINGTON, DC 20044-4300

EXAMINER
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CHORBAJI, MONZER R

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 02/14/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/744,297

Applicant(s)

GOELDNER, HELMUT

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

In claim 41, line 2; applicant refers to heating means provided in the conveyor system. The specification does not provide description for such a limitation.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bearing and the slide runners in claim 44 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 25, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 25, lines 2-3; applicant uses the following term "the second treatment zone is subdivided into a plurality of sections each having a different temperature". Does the applicant mean that from the point of introducing steam to the top of the treatment chamber, temperature increases as the steam builds up in the top portion of the chamber? Or does the applicant mean that such a (plurality of sections) temperature gradient exist in moving from the bottom of the chamber to the top in the second treatment zone? Clarification is needed to understand the meaning of claim 25. The same applies to claim 34.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 23-28, 31-33, 35, 40-43, and 45-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldner et al (U.S.P.N. 5,270,000).

With respect to claims 23, 33 and 36; Goldner et al teaches the following: a method and an apparatus for treating contaminated material (col.1, lines 5-6), an input unit (figure 1, 3), a conveyor system (figure 1, 24 and 16), a treatment chamber, which slants upward from a lower inlet (figure 1, 16), treatment chamber includes a first treatment zone (figure 1, 7 and 18) and a second treatment zone (figure 1, the unlabeled internal space of 16), an upper discharge

end (figure 1, 27), contaminated material is moistened (figure 1, 19) in a liquid reservoir (since the treatment chamber 16 is slanted, it will inherently contains a reservoir in its lower end from the accumulating liquid) in first treatment zone (first heating zone) which is adjacent the lower end of the chamber by liquid present in the material (contaminated material inherently contains liquid) or water added (figure 1, 20) from the outside the treatment chamber (figure 1, 19), liquid in reservoir having a temperature below the boiling point of water by having heating means (col.10, lines 33-36. This would inherently increase the temperature of liquid sprayed by 19), and in the second treatment zone which extends from the first treatment zone to the upper end of the chamber, the material is heated to a temperature above the boiling point of water (col.1, lines 59-67) to create steam pressure (col.2, lines 46-51).

With respect to claim 24; Goldner et al teaches that the contaminated material is contaminated with infectious microorganisms (col.1, line 6).

With respect to claims 25 and 34; Goldner et al's method and apparatus inherently have regions within the second treatment zone having a range of temperatures since temperature of the adjacent region of the first zone is lower than the temperature of the adjacent region of the second zone. Also, as the material moves up the second zone its temperature increase as the steam builds due to increased exposure to microwave energy, thus resulting in plurality of sections each having a different temperature.

With respect to claims 26-28, and 35; Goldner et al teaches the following: the steam pressure in the second zone is generated by evaporation of the inherent moisture (col.2, line 46) or by evaporation of liquid water added to the contaminated material from outside the treatment chamber (col.2, line 46 and figure 1, 19 and 20), and the steam pressure in the second zone is generated (heating of the contaminated material by steam, col.10, line 13) by introducing steam into the chamber (col.10, lines 9-14).

With respect to claims 31-32, 43, and 46; Goldner et al teaches the following: contaminated material is introduced in portions (figure 1, 13) into the treatment chamber (figure 1, 3), portions introduced and discharged from the treatment chamber through locks (figure 1, 4 and figure 5, 64).

With respect to claims 40-42, and 45; Goldner et al teaches the following: heating means provided in an inner wall of chamber (figure 5, 65), heating means is provided in conveyor system (figure 1, 25), means for controlled introduction of microwave energy into treatment chamber (figure 6, 16 and 25), a shredder in input unit (figure 1, 6 and 15).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000).

With respect to claim 44; Goldner et al teaches the use of an inclined screw conveyor (figure 1, 24 and col.5, line 27). However, the bearing and the slide runners are intrinsic structural parts of an inclined screw conveyor. See figure 1 where the lower end of 16 must intrinsically has a slide runner of a support item or a bearing.

With respect to claim 47; Goldner et al teaches a plurality of treating apparatuses (figure 1, 18, 16, 17, 44, and 50) arranged parallel. However, having such a plurality of treating apparatuses is within the purview of a person skilled in the art so that the capacity of treating contaminated material can be increased.

10. Claims 29-30 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldner et al (U.S.P.N. 5,270,000) in view of Kline et al (U.S.P.N. 5,425,925).

The teachings of Goldner et al have previously been set forth with regard to claims 23-28, 31-36, and 40-47. With respect to claims 29-30 and 37-39, even though Goldner et al does not disclose a mechanism to control the excess water build up which inherently results from having an inclined chamber, such a mechanism of controlling the level of water in the bottom of the chamber is an intrinsic property of the apparatus.

With respect to claims 29-30 and 37-39; Kline et al, which is in the art of treating contaminated material (col.1, lines 13-19) by having an inclined chamber (figure 2, 76) teaches the following: the first treatment zone includes a liquid reservoir (figure 1, 104), which is regulated by a weir or an overflow (figure 1, 108); liquid discharged from the weir or an overflow is recycled back to the liquid reservoir (figure 1, 54 and 46); a collection vessel (figure 1, 106, 54, 162, and 46), and where the weir or an overflow (figure 1, 108), the collection vessel (figure 1, 106), and the return line (figure 1, 54) are maintained at the same pressure as the treatment chamber (figure 1, 46). Since the chamber (figure 1, 46) is opened at its lower end (figure 1, 88 and 89) to the liquid reservoir, thus the above-mentioned structures are at the same pressure. Thus, it would have been obvious and one having ordinary skill in the art would have been motivated to utilize the teachings of Kline et al into Goldner et al in order to design a tank in the lower end of the chamber to enable the collection of fines for periodic removal (Kline et al, col.11, lines 21-23).



### ***Conclusion***

11. The prior art made of record but not relied upon is considered pertinent to applicant's disclosure. Kline et al (U.S.P.N. 5,656,248), Clawson et al (U.S.P.N. 5,455,005), and Bridges et al (5,487,873) teach the concepts of using an inclined chamber with steam and radiation heating means, and using the concept of slide runners. In the IDS, (DE 92135.4) discloses the concept of using slide runners in figure 1.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (703) 305-3605. The examiner can normally be reached on M-F 8:30-5:00.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 305-7719 for After Final communications.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Monzer R. Chorbaji *MRC*  
Patent Examiner  
AU 1744  
February 10, 2002